

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/110931 A2

(51) International Patent Classification?: **C01F 7/00**
(21) International Application Number:
PCT/JP2004/008546

(22) International Filing Date: 11 June 2004 (11.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003-167778 12 June 2003 (12.06.2003) JP
60/479,836 20 June 2003 (20.06.2003) US

(71) Applicant (for all designated States except US): **SHOWA DENKO K.K.** [JP/JP]; 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo 105-8518 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KAMIMURA, Katsuhiko** [JP/JP]; c/o Showa Denko K.K. Yokohama Plant, 8, Ebisucho, Kanagawa-ku, Yokohama-shi, Kanagawa 221-0024 (JP). **YAMADA, Tomiharu** [JP/JP]; c/o Showa Denko K.K., Yokohama Plant, 8, Ebisucho, Kanagawa-ku, Yokohama-shi, Kanagawa 221-0024 (JP).

(74) Agent: **OHIE, Kunihsa**; Ohie Patent Office, Selva-Ningyocho 6F, 14-6, Nihonbashi-Ningyocho, 2-chome, Chuo-ku, Tokyo 103-0013 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PRODUCING PARTICULATE ALUMINA AND COMPOSITION CONTAINING PARTICULATE ALUMINA

(57) Abstract: One embodiment of the present invention provides a method for producing a particulate alumina, comprising heat-treating (calcining) a composition comprising alumina, an alumina hydrate, ammonium chloride and a halogen compound other than ammonium chloride and then disintegrating the heat-treated product.

WO 2004/110931 A2